FIGURE 1

1 gtcgacctgc aggtcaacgg atctgagagg agagtagctt cttgtagata acagttggat 61 tatataccat gteetgatee eetteateat eeaggagage agaggtggte accetgatag 121 cagcaageet gggggetgea gettggtggg tagaggtaet caggggtaea gatgteteea 181 aacctgtcct gctgccttag ggagcttcta ataagttgat ggatttggtt aaaattaact 241 tggctacttg gcaggactgg gtcagtgagg accaacaaaa agaagacatc agattatacc 301 ctgggggttt gtatttcttg tgtttctttc tcttctttgt actaaaatat ttacccatga 361 ctgggaaaga gcaactggag tctttgtagc attatcttag caaaaattta caaagtttgg 421 aaaacaatat tgcccatatt gtgtggtgtg tcctgtgaca ctcaggattc aagtgttggc 481 cgaagccact aaatgtgaga tgaagccatt acaaggcagt gtgcacatct gtccacccaa 541 gctggatgcc aacatttcac aaatagtgct tgcgtgacac aaatgcagtt ccaggaggcc 601 caaatgaaaa tgtttgtact gaaatttgtt aaagcttccc gacaaactag atttatcagt 661 aaggattgtt ttctgcaagg gggatgaaac ttgtggggtg agccatttgg gctgaggagg 721 agggaggttg gagctgagaa atgtggagac aattteeett tagaaggaet gaateteeet 781 gcctctctgg ggtgcggcag ccagcaggat ccaatggtgt atatgtctcc ccagctcccc 841 attcagtgat atcatgtcag tagcttgaaa ttatccgtgg tgggagtatt atgtcatgga 901 aattggcaaa tggaaacttt tattggagat tcaattgtta aacttttacc agcacaacac 961 tgccctgcct tcagagtcaa tgaccctatc caagtttaat ccatctgtcc actgtctcca 1021 acacgatett tataaaaacae acetgacaae attaccettt tatteagttt tttaaaaagat 1081 aagtttccag ctcatcgggg tggctttaaa ggccatttct cctctggacc tcacccaact 1141 tttcaaatca cttttcctac ccctacctct aaatgctact caaactccag ccatcctgaa 1201 taataagact tttgaaaagt agattatggg ctgggcacag tggctcacac ctgtaatccc 1261 agcactttgg gaggccaaga tgggtggatc acctgaggtc gggagttcga gaccagcctg 1321 actaacatag tgaaaccctg tctctactaa aaatacaaaa ttagttgggg gtggtggcac 1381 aagcetgtaa teecagetae teaggaggtt gaggeagggg aattgettga acetgggagg 1441 cggaggttgc ggtgagccta gattgctcca ctgcactcca gcctgggcaa caagagcgaa 1501 actocatoto aaaaaaataa ataaataaat aaagtagatt acatoagata cototggoot 1561 aggttgttta tgaccaactc tcctgctgag aataactaga aaagctagac aaaacatatt 1621 tecaaaagat etetttggag geateagaga atggeeaagg etgtaaggaa etgeetgage 1681 ccagagaggt ggagcccagc actggtgccc tttactcctg gggacatgtg ctggtttcaa 1741 aaacttcage tgagettttg ageattcatg gaacttggtg ggggagatga aatttgtace 1801 ttaaateetg cetacaggga gggteeetga taateeceae ceaatttgga aatetgggte 1861 agcettcaca ggtactgaag ceetcetetg aatgatetca agteetgeta gggtagaggt 1921 tacctgcttt tgaaaggctc ctggcctacc tgtgcagcag gagcaaaagt gaaccatctc 1981 agggtacaga taacaatcat ccagagcett gaatgacete taetgtgett aatatatagt 2041 attcagcagt cagtaaaaag gatttaggca catgcaagat gacctgtgta tcagggagaa 2101 ataggcaata aattgagatc cagcagggat ttgaatcatg gatttgaatc aggggcagcc 2161 ttcgaaagaa ctatggagaa tatactcaga tttaaaacat aagattggaa tttttggcag 2221 agaactaaca actgtacaaa aaaggaacca aatggaaatc ctagaactga aagatgcaat 2281 taaccgatgt tgagaaatag ccaacatcta ttgaacactt cccatgtgga cagctgtgct 2341 aaacacttta caggcatcaa cataagatgt gtccccttac agcagtgcag tgtccctcct 2401 aagacatgga cagcctggtt teectatete tetgetteat caaaacceet ttacgtgggg 2461 cttagacact cctgttgtct ctagtgtcta gtagcacagg gctcagcaca tggaagccac 2521 tagatacaat ttgatgacca ggacctccga tgaaagccat gggtgctgat tgggaaggca 2581 ttgtctttta tgtgctatgg tcttaaagct tcatccagga agcagaactc ggggggtgct 2641 gaggacccag aaccgagaat aagattagtc agagatttcc tgtgggcaga aatcataagg 2701 acgccaactg tttgggtgag ataagacgaa accaagagtg gacttgtggc cagaagcgtg 2761 aggaagaggg agagagette cettgteece tttetteete teectaagee acagtgattg 2821 acagecece egetttggag teagageagg ettgagaetg gaetgggaaa ggagggtggg 2881 tcaggataca gagcaggaag gctgggagtg cagggcagga gcaaggggct ggggcattca 2941 ttgtgcctga tctctcccac tttacctggg gtaaagaagc atatgcaaaa gccacggtgt 3001 gagtatttcc caagtgccag ggtcagggca tgattcatca cgtgcagcat ttcattcaat 3061 ccttatagta accgatgatg tggcttctat tattagctct atcagataat gaaactgaga 3121 ccaagacagg ctctgcacat tgtgtggggt aatgacacag ggggattcag acctagactc 3181 cataactcct gccccaggga ccaccccac cctcaccctg tgcatgtcga caaaggacag 3241 actgggccac ttctcaggac acagcgggga aatgacacag agcagggagg ttccaggagc 3301 cccgagcgtc ttttctccag gagaatactc tctgaattca gactggggtc agagaaacat 3361 ttacccagga gccgcagtgt gggtggggct ttttacttga aacgctgtct gaaggcagtg 3421 gcaggatgaa etetecacee taeettggca agecaettet ettetgcaat etgtaaggae

FIGURE 1 (continued)

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3481 attgttgaga gaattatggt cttccaattc cggagggttg aagaaagaca aataggagag
3541 aacctateat agteaggtge tagetgeett etettteaga gagtgtgaga ataaagtgat
3601 acacttgatt attagcaaat actttggaaa ttttaaacgc taatattcaa cacactctgg
3661 aagaggcaaa taagtagaca ggttcatata catcatctcc ttcagctagt cctcacaaaa
3721 acaaacaaat gaataaacaa aattottott tggccctcat aggaagacac tgtttottga
3781 acgtgtttca aaaaggatgg gtgactcact caaggtcaca ctgtttatga ggacagtaca
3841 ggaatacaga catgccattt tgcctgaaaa aatccatcac ccagggaggt gacacaattt
3901 tgcagaaatg ttctatttcc tctgaaggat acattcttta aacctttggg aaattcattc
3961 atagtettee teetttgaag gattaetete tggacacaaa gtgtttgatt etgatttgtt
4021 ggttggaaga tgtgttggtt gagagaaaga ttctgatttg ttggttgaaa atagactcat
4081 caagatcaac tgctgtagta graaatattt tgacattttg tctgtattcc tgtgctgccc
4141 tcacaagctg catcaccttg agtgagtcat tcatactttt ttgtttgttt ttgttttgga
4201 gatggagtet tactetgttg cetaggetgg agtgeggtgg egtgatettg geteaetgeg
4261 acctocatet cetgggtica agtgatecte etgeeteage etecegagta getgggatia
4321 caggcacatg ccaccatece tgctaatttt tgcattttca gtagagacgg agtttcacca
4381 tgttggtcag gttggtcttg aactcctgac ctcaggtgat ccgcccacct cagcctcccc
4441 aagtgctggg attacaggtg tgagccaccg tgcccagccc agccatcatt tttgaaacac
4501 gtttgagaaa tagtgtcttc ctttgagggc caaggagaca ttttttttgt ttatttgttt
4561 gtttttgtga ggactagctg aagggggtga tgtatattaa cctgcctact tatttgcctc
4621 ttcccagagt gtgatgaata ttagggttta aagtttctga agcatttgtt aataaagccc
4681 ggggctggag gtcagaagac ctggatttct ctgcatactt ttgccatcag caagctgtgt
4741 gaccttggac agatcccttt tttgtctaaa tctttctgag tcttcttgaa aacaatgcca
4801 ggttgggaca ggatgattgc caageteegg tecageteta aaacaetgca aegtatgett
4861 ctgcaccage actgtccate ctgtagatea tgcagaaatt ctcttcaact ttttcctacc
4921 cataaaatag gagcatgett acetttttee taatgtteea ggeeeegggt etagatattg
4981 taagtaagga agttaatgtg tatcagagcc cattatgggc cagaagttct cctcttcctt
5041 cctacacctg cttcctccct ccctccctcc ctctttccct tccttccttc catccatttg
5101 tgaagaagac atgatcaccc tcattctgag agtgaagaga cagaggctca actaatgaaa
5161 tgatttgttc aaggtcacac gggtggcaca aggcaagtgg cagaggttga atttagaccc
5221 attectgtcc aaatgetgag tttatgtcat cgtcccgaga ccataacttt aaagatgtaa
5281 gatagtggga aaagagttga tttcaaagca cctctcagaa ggactcactt tacatcaggg
5341 gtcagcagac tcaggccaaa tccggtccat tccccgcttt tgcaaagaaa gttgtagtgg
5401 aacacageta ggettattga titatggatt gecaaegtee tittgtgaaa cagacagetg
5461 agctgagtaa tcgtggcgca caaaacctaa aatatttact atctcgtcct ttacagaatg
5521 tttgccaatc tatggtccgg agtccaaggc tgtccatttt tcaaagaaca caaagtgaca
5581 tgagactgtc ccatgtgcag ggagccctat cattttatta tgaaaaaacg gcctttctgc
5641 tcaaatctgt tttttaaaaa gtcaacaaac agactctggg tacctgtcag gaacagtagg
5701 gagtttggtt tccattgtgc tcttcttccc aggaactcaa tgaaggggaa atagaaatct
5761 taattttggg gaaattgcac aggggaaaaa ggggagggaa tcagttacaa cactccattg
5821 cgacacttag tggggttgaa agtgacaaca gcaagggttt ctctttttgg aaatgcgagg
5881 aggqtatttc cgcttctcgc agtggggcag ggtggcagac gcctagcttg ggtgagtgac
5941 tatttettta taaaceacaa etetgggeee geaatggeag teeactgett getgeagtea
6001 cagaatggaa atctgcagag gcctccgcag tcacctaatc actctcctcc tcttcctgtt
6061 ccattcagag acgatctgcc gaccctctgg gagaaaatcc agcaagatgc aagccttcag
6121 gtaaggctac cccaaggagg agaaggtgag ggtggatcag ctggagactg gaaacatatc
6181 acagctgcca gggctgccag gccagagggc ctgagaactg ggtttgggct ggagaggatg
6241 tccattattc aagaaagagg ctgttacatg catgggcttc aggacttgtg tttcaaaata
6301 toccagatgt ggatagtgcg accggaggc tgtcttactt tcccagagac tcaggaaccc
6361 agtgagtaat agatgcatgc caaggagtgg gactgcgatt caggcctagt tgaatgtgct
6421 gacagagaag cagagaggg caccaggggc acagcccgaa ggcccagact gatatgggca
6481 aggcetgtet gtgctgacat gtcggagggt cccactctcc agggaccttg gtttccccgt
6541 ctgtgacatc tgtgacatga gagtcacgat aactccttgt gtgccttaca gggttgttgt
6601 gaaaattaaa tgcacagata atagcgtaac agtattccgt gcattgtaaa gagcctgaaa
6661 accattatga titgaaaatg gaatcggctt tgtgagacca tcactattgt aaagatgtga
6721 tgctgataga aatgacagga ctgcttgtgc atgccctctg cagtgtgaca ttccagcagt
6781 gaaatcatgt tggggtgact tctcccccac tctgaccttt atgtttgtct gggccgaggc
6841 tgcaagtcgg getetgtggg tgtatgagtg acaagtetet eeetteeaga tatggggaet
6901 gtctgcttcc ctaggttgcc tctccctgct ctgatcagct agaagctcca ggagatcctc
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FIGURE 1 (continued)

6961 ctggaggccc cagcaggtga tgtttatccc tccagactga ggctaaatct agaaactagg 7021 ataatcacaa acaggccaat gctgccatat gcaaagcact ttggtttgcc tggccacccc 7081 tegtegagea tgtgggetet teagageace tgatgaggtg ggtaeagtta gecacaette 7141 acaggtgaag aggtgaggca caggtcccag gtcaggctgg ccggagctct gtttattacg 7201 totcacaget ttgagteetg eteteaacea gagaggeeet ttaccaagaa gaaaggattg 7261 ggacccagaa tcaggtcact ggctgaggta gagaggaagc cgggttgttc ccaagggtag 7321 ctgctcctgc aggactctga gcaggtcacc agctaatgga ggaaaggctc tagggaaaga 7381 cccttctggt ctcagactca gagcgagtta gctgcaaggt gttccgtctc ttgaaacttc 7441 tacctaggtg ctatggtage cactagtete aggtggetat ttaaatttat acttaaatga 7501 atgaaaatag aagaaaattt aaaatccaga cccttggtca cactatccac atttaaagag 7561 gtcaatagec acatgtggtt agtggccacc ctattgggca gtgcagctac agaacatttt 7621 tgcatcccag aaagttettt tggatgttgc tgctctacag catgetttgc tgaaacagaa 7681 gtgccttccc tgggaatctc agatgggaag caagtaagga ggggagtcaa atgtgggctc 7741 actgeteace agergtgagg gtrgggeetg cerettaace attgteagee teagrettet 7801 catccatgca tgccgtgggt atactaaaat actatacccc tggaagagct ggatgcaaat 7861 ttgacaagtt ctgggggaca caggaaggtg ccaagcacaa ggctgggcac atggtggctg 7921 tgcactacag ctgagtcctt ttccttttca gaatctggga tgttaaccag aagaccttct 7981 atctgaggaa caaccaacta gttgctggat acttgcaagg accaaatgtc aatttagaag 8041 gtgagtggtt gccaggaaag ccaatgtatc tgggcatcac gtcactttgc ccgtctgtct 8101 gcagcagcat ggcctgcctg cacaaaccct aggtgcaatg tcctaatcct tgttgggtct 8161 ttgtattcaa gtttgaagct gggagggcct ggctactgaa gggcacatat gagggtagcc 8221 tgaagaggt gtggagaggt agagtctagg tcagaggtca gtgcctatag gcaagtggtc 8281 ccagggccac agctgggaag ggcaaatacc agaaggcaag gttgaccatt cccttcctca 8341 agtgcctatt aaggctccat gttcctatgt tgttcaaacc ctaactcaat cccaaattaa 8401 tocaccatgt ataaggttga getatgtete ttatteetgg acaccatact cagccatate 8461 tggtccacac attaacagct ggatgacctt gaagaagctt cacccactct gttcctcagc 8521 tttcccttca gtgggatgat atcaactgga caacaggatg tgcgattctt ttagttccag 8581 ccttccagga tgttttcact cccctgtttg ttgttgtagg atggtattac ctccaccttc 8641 ccaccttccc tatgccctgg ttctgtctcc tgtgcctcgc tctgaaagtg gatgagacct 8701 acaatteetg teetggtagt teteetaatg aacacactga ageacgagga agetgagatt 8761 tttgttgcta catgagagca tggaggcctc ttagggagag aggaggttca gagactccta 8821 ggetectggt ggagececae teatggeett gtteatttte cetgeecete ageaacaete 8881 ctattgacct ggagcacagg tatcctgggg aaagtgaggg aaatatggac atcacatgga 8941 acaacatcca ggagactcag gcctctagga gtaactgggt agtgtgcatc ctggggaaag 9001 tgagggaaat atggacatca catggaacaa catccaggag actcaggcct ctaggagtaa 9061 ctgggtagtg tgcatcctgg ggaaagtgag ggaaatatgg acatcacatg gaacaacatc 9121 caggagactc aggcctctag gagtaactgg gtagtgtgca tcctggggaa agtgagggaa 9181 atatggacat cacatggaac aacatccagg agactcagge ctctaggagt aactgggtag 9241 tgtgcttggt ttaatcttct atttacctgc agaccaggaa gatgagacct ctctgccctt 9301 ctgacctcgg gattttagtt ttgtggggac caggggagat agaaaaatac ccggggtctc 9361 ttcattattg ctgcttcctc ttctattaac ctgaccctcc cctctgttct tccccagaaa 9421 agatagatgt ggtacccatt gagcctcatg ctctgttctt gggaatccat ggagggaaga 9481 tgtgcctgtc ctgtgtcaag tctggtgatg agaccagact ccagctggag gtaaaaacat 9541 gctttggatc tcaaatcacc ccaaaaccca gtggcttgaa acaaccaaaa ttttttctta 9601 tgattctgtg ggttgaccag gattagctgg gtagttctgt tccatgtggt ggaacatgct 9661 ggggtcactt tggaagctgc attcagcaga gtgccaggct tgcgctgggc atccaaggtg 9721 gtccctcatc ctccaggctc tctttccatg tgatctctca gtgtttaaga gttagttgga 9781 gcttccttac agcatggcgg ctgacttcca aaagggatta ttccaaaaag agcctcaaca 9841 tgcaggcgct tattatgact tctgcttgca tcatcctatt ggccaaagcc agtcacgtgg 9901 ctaagtctag cccctgtga gaggagactg cataagagtg tgaacaccag gagacacggt 9961 cactgggggc caccactgta accatctacc acaggacctg aatctctgtg tgctactccc 10021 ttgctcaagg gccccctac ccacgcagac ctgctgtctt ctagcaaagc ccatcctcag 10081 gacctttete ttecaateet tattgactea aattgattag ttggtgetee acceagagee 10141 ctgtgctcct ttatctcatg taatgttaat gggtttccca gccctgggaa aacatggctt 10201 tgtctcaggg gcttgctgga tgcaacctta acctcaatgt gagtggccat actgtggcac 10261 tgtcccatcc ctcaccaggg acactgttct ggagggtgac tgcctgttct gtgaggagtg 10321 gggatggcta ggacattgca tggaacacac caccaccca tettetcaga getcaaacce 10381 tgacagaaca ccagetccae aggeettgge ttetgetgat ggtgeegtgt atttaccaga

FIGURE 1 (continued)

10441	cttagtggtc	caaggccaga	gtggcagatt	tcccaaagtc	aaggtgtgac	agtgggagag
10501	cctctttgtg	tctttqctqt	cctaagaaac	ctaggccagg	ccadacacaa	taactcacaa
10561	cttgtaatcc	cagcactttq	agaggccaag	gtgggcagat	cacgaggtca	agacttcacgc
10621	accagectgg	ccaacattgg	tgaaaccctg	tctctattaa	aaatagaaaa	cattagagag
10681	gtgtggtggt	gcatgcctgt	aatcccagct	acticaggagg	ctgagggagg	agatagatt
10741	gaacccagga	ggtggaggtt	gcagtgagcc	gagattgtgc	cactocacto	Gaggetage
10801	gacagagcaa	gactccgtct	caddaaaatt	aattaataaa	taaataaacc	tagectagge
10861	agtcccacag	aatggcagac	aggaggaggt	aggaacttt	agggtatagg	atttaggteedag
10921	tactaactct	gggctgtcca	gaggggattt	cataggatag	agggtatggt	accededig
10981	aggacttcct	aggeeteage	totoacctoo	ccatctttc	atttccacc	gaggcagcac
11041	actgacctga	gcgagaacag	aaancannac	aagcgcttcg	ccttcatcc	atcacaca
11101	ggccccacca	ccagttttga	atctaccacc	taccccatt	gattactat	cccagacage
11161	gaagetgace	agcccatcag	cctcaccaat	atacctaca	aaaacatcat	cacagegatg
11201	tictactica	aggaggacga	gragtactos	ccadacetae	Cluffcccar	tattacataa
11281	caaggactgc	agggactgcc	agteceeta	ccccaggggt	cccaactata	agagagtas
11341	ggaccagcca	ttgaggggtg	gacceteaga	aggcgtcaca	acaacctggt	cacaccactc
11401	tgcctcctct	tcaactgacc	agectecatg	ctgcctccag	aatggtcttt	ctaatgtgtg
11461	aatcagagca	cagcagcccc	tgcacaaagc	ccttccatgt	cacctctaca	ttcaccatca
11521	aaccccgacc	acctgcccaa	cctqctctcc	tcttgccact	acctetteet	ccctcattcc
11581	accttcccat	gccctggatc	catcaggcca	cttgatgacc	cccaaccaag	taactcccac
11641	accctgtttt	acaaaaaaqa	aaagaccagt	ccatgaggga	ggtttttaag	agttataa
11701	aaatgaaaat	taggatttca	tgatttttt	ttttcagtcc	ccataaaaaa	gagcccttca
11761	tttggagatt	atgttctttc	ggggagaggc	tgaggactta	aaatattcct	gcatttgtga
11821	aatgatggtg	aaagtaagtg	gtagcttttc	ccttcttttt	cttctttttt	tataatataa
11881	caacttgtaa	aaattaaaag	ttatggtact	atgttagccc	cataattttt	tttttccttt
11941	taaaacactt	ccataatctg	gactcctctg	tccaggcact	gctgcccagc	ctccaagete
12001	catctccact	ccagattttt	tacagetgee	tgcagtactt	tacctcctat	cagaagtttc
12061	tcagctccca	aggctctgag	caaatgtggc	tcctgggggt	tctttcttcc	tetecteaac
12121	gaataaattg	ctccttgaca	ttgtagagct	tctggcactt	ggagacttgt	atgaaagatg
12181	gctgtgcctc	tgcctgtctc	cccaccagge	tgggagctct	gcagagcagg	aaacatgact
12241	cgtatatgtc	tcaggtccct	gcagggccaa	gcacctagcc	tcactcttaa	caggtactca
12301	gcgaatgaat	gctgtatatg	ttgggtgcaa	agttccctac	ttcctgtgac	ttcagctctc
12361	ttttacaata	aaatcttgaa	aatgcctata	ttgttgacta	tgtccttggc	cttgacaggc
12421	tttgggtata	gagtgctgag	gaaactgaaa	gaccaatgtg	tvttvcttac	cccagaggct
12481	ggcgcctggc	ctcttctctg	agagttcttt	tcttccttca	gcctcactct	ccctggataa
12541	catgagagca	aatctctctg	cgggg			

FIGURE 2

- 1 meicrglrsh litlllflfh seticrpsgr ksskmqafri wdvnqktfyl rnnqlvagyl 61 qgpnvnleek idvvpiepha lflgihggkm clscvksgde trlqleavni tdlsenrkqd 121 krfafirsds gpttsfesaa cpgwflctam eadqpvsltn mpdegvmvtk fyfqede